

REMARKS/ARGUMENTS

Amendments in General

1. The specification has been amended at paragraphs 36, 37, 38 and 40 to further correlate the portions of the application. Specifically, the application has been amended to correct the errors related to the misidentification of pieces in paragraph 38. The specification has also been amended to correct the name of the slip-type gas tube support ring 130.
2. These changes add no new matter to application and acceptance of these changes is respectfully requested.
3. Claims 2 and 3 of the application have been further amended to indicate that the device comprises three separate pieces.

Claim Rejections - 35 USC §102

4. The Examiner rejected claims 1-3 under §102(b) as being anticipated by both Swan (U.S. Pat. No. 6,499,245) and Morris (U.S. Pat. No. 4,765,224).
5. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d. 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 828 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). MPEP § 2131.
6. One of the key novel features of the present invention is that the three-piece barrel nut assembly of the present invention allows a party to quickly and easily attach and detach a barrel from a firearm, particularly an AR-15 or an M-16 rifle.
7. The present invention makes this feature available because the gas-tube supporting the device is not fixedly attached to the locking device as is shown in the prior art.
8. The prior art teaches a one-piece structure that provides both the means for connecting the barrel to the upper receiver of the firearm, as well as supporting the gas tube that is configured to extend along the length of the barrel of the device.

9. The prior art barrel nuts are single piece units 44, 170 that contain a threaded end that is configured to fit upon the upper receiver end of a firearm and a plurality of projections that extend from the nut. Examples of these devices are shown in Figures 10 and 11 of U.S. Pat. No. 4,765,224 and Figures 17-20 of U.S. Pat. No. 6, 499,245. These pieces 44, 170 may be combined with other items as shown in these figures such as a spring 39, 163, or a D-ring spacer 56, 162, or a bearing 38, 164. However, these items do not hold the barrel and the upper receiver of the gun together, nor are they the same as the connection sleeve, stabilizing means or the locking device that is taught in the present invention. These items are merely common spacers and expansion devices that are well known in the industry.

10. In the prior art embodiments cited by the Examiner, the only item that actually functions to hold a barrel to an upper receiver is the barrel nut 44, 170.

11. The prior art barrel nuts 44, 170 have a plurality of projections that extend therefrom. The projections define spaces through which the gas tube of the gun must extend. If the gas tube is bent, the air from the barrel cannot be allowed to pass and the gun can jam and malfunction. Therefore, it is essential that the gas tube align with the pre-formed notches in a way that the alignment of the gas tube remains straight.

12. The prior art barrel nuts are one piece; therefore in order to align the portion that supports or receives the gas tube, the torque on the threaded portions of the device must be either overly increased or decreased so that the gas tube support sections are properly aligned. This results in a variety of problems including embodiments where the nut is either over tightened and the barrel cannot be removed or embodiments where the barrel fails to stay true and connected. In a combat situation, the situation where many of these devices are typically used, these limitations can be life threatening.

13. Furthermore, in embodiments where the barrel nut is flat and the device is used in conjunction with a sight, such as the embodiment shown in U.S. Pat. No. 6,499,245 (Swan), the barrel nut must be aligned so that the flat portion fits below the scope, which would be connected to the rail or Picatinni rail, which extends along the top portion of the yoke. To restore proper alignment of all of the pieces, the device must often be taken to a gunsmith who would have to re-sight the gun and make other modifications and adjustments to these various pieces of hardware so as to properly align the device. This configuration also means that prior art barrel nuts cannot be interchanged because the position of the barrel is dependent upon the specific positioning of the barrel nut that corresponds to that gun.

14. The present invention is fundamentally different from these prior art devices.

15. First, the prior art device is a single piece while the present invention is three separate pieces.

16. Second, the present invention utilizes a gas-tube stabilizing device that is floating or not fixedly connected to the conduit sleeve. This allows the gas tube to be positioned in a desired position without regard to the torque that is placed upon the gun barrel by the connection sleeve or the locking device.

17. Third, the locking device of the present invention has an infinite number of tightening positions and is not limited to those positions where a gas tube passageway allows passage of a gas tube therethrough.

18. None of the features are present or shown in the prior art references cited by the Examiner. Therefore, the present invention cannot be anticipated by the prior art references cited by the Examiner.

19. These features provide several advantages to a user. First, the present invention allows a gas tube to be aligned and stabilized without having to over torque the barrel nut. This provides a user with the ability to tighten the device only to the level wherein the connection sleeves and the locking devices tightly hold the barrel in place. The independent positioning of the gas tube stabilizing device, and the absence of a gas tube positioning gasp in the locking device allows this to take place.

20. Another advantage of the present invention is that the barrel nuts are interchangeable between various rifles. This is a distinct advantage over the prior art, which requires that specific barrel nuts be selected and formed by a gunsmith for a particular firearm. Since a gas tube stabilizing device is configured to be generally independent from the connection sleeve and the locking devices, as long the threads on the connection sleeve are configured to connect with the upper receiver portion of the firearm and the threads of the locking device are configured to connect with the connection sleeve, the barrel nut combinations are completely interchangeable.

21. Another advantage of the present invention over the prior art is that the appropriate torque upon the locking device and the connection device does not require any specialized tools and in a combat situation, a party may loosen and remove a barrel from a firearm, replace the barrel and continue fighting without the problems associated with the torquing that exist in the prior art.

22. None of the prior art cited by the Examiner teaches a device that includes all of these features. Therefore, the present invention cannot be anticipated by any of these items or devices.


Conclusion

Reconsideration and allowance of the application as amended is respectfully requested.

If the Examiner after reviewing these materials still feels that a final rejection is necessary, Applicant's attorney respectfully requests a telephone conference to discuss these grounds for rejection. The Examiner is invited to telephone the undersigned at the number given below.

DATED this 20th day of July 2004.

Very respectfully,



DEREK H. MAUGHAN
Reg. No. 52,007
(208) 345-1122

CERTIFICATE OF MAILING

I HEREBY CERTIFY that this correspondence is being deposited with the United States Postal Service on the below date as first class mail in an envelope addressed to:

Mail Stop Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

DATE: July 20, 2004

Amber R. Smith

